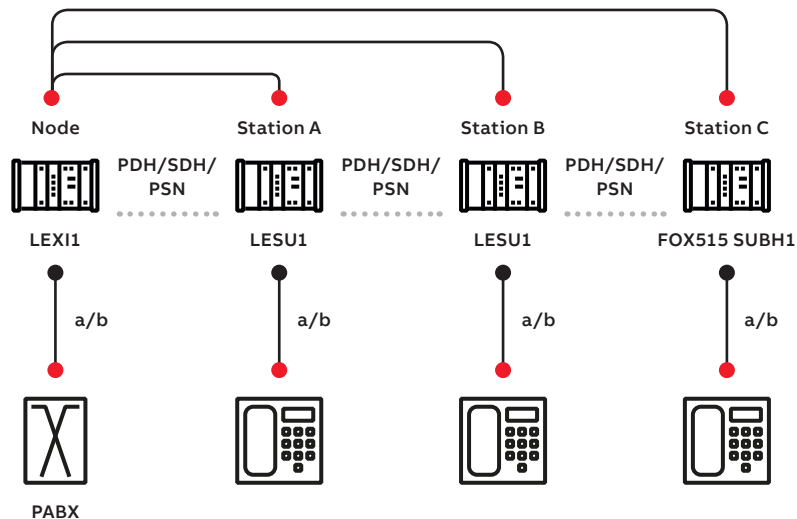


FOX615 LESU1

POTS line card with 16 POTS (FXS) interfaces with extended voltage protection for dedicated networks



01 Line extension for remote subscribers with LESU1 and LEX11

FOX 615 offer communication to such applications with the PSTN line card LESU1 offering 16 ports for traditional POTS services.

Its wide range of configurable modes ensure inter operation with a large variety of exchange protocols:

- 16-port FXS 2-wire interfaces unit
- DTMF and pulse dialing
- CLIP support
- 1+1 path protection supported
- Extended line test functions
- Extended voltage protection for dedicated networks
- All functions from one network management system
- Inter-operable with FOX515 EXLAN for remote subscriber configuration or SUBH and PHLCx for hotline configuration

Overview

The LESU1 provides 16 POTS interfaces that connect traditional telephone subscribers to the telecommunication networks. This universal line card supports the POTS requirements of different countries world wide. The LESU1 is compatible for voice delivery in the access network of dedicated networks and public switched telephone network (PSTN).

Voice communication is one of the most important application for reliable operation of power grids. Especially during blackout conditions voice communication between control center and substations as well as between substations is required. Typically a limited amount of subscribers (often legacy technology) exist in substations, often configured as remote subscribers.

POTS in dedicated networks and PSTN

With the availability of COSI1 VoIP media gateways in FOX615, POTS services can be directly integrated in VoIP network architectures.

Enhanced line test functions

The integrated line test function on the LESU1 is a powerful tool used by operators to pre-qualify a subscriber line remotely as well as to perform fault isolation. The line tests can be launched remotely from the network operation centre.

This simplifies the operation processes and reduces operational cost in the whole sales life cycle of a POTS service. They can be activated either automatically (cyclic test) or manually (on-demand test), giving operators the freedom to test as required.

Management

The management of the LESU1 is integrated in the FOXMAN-UN / FOXCST management system. By having one element manager for all types of services, operators will accelerate the provisioning process. This element manager ensures more efficient OAM&P (Operation, Administration, Maintenance and Provisioning) and lower operational costs.

Technical Data

POTS Interface	
Number of POTS ports	16
Mode of Operation	
Softswitches	SIP (via COSI1)
Other modes	MELCAS (MCAS), phone-exchange, phone-phone automatic ring down
Services	
Analog voice	Supported
Fax/Modem	Supported
Analog Line Parameters	
Line impedance	Configurable
Voice encoding	A-law
Ringing	Supported; on-board ringer
Dialing	DTMF and Pulse
Offhook loop current	15 to 45 mA
Pulse metering	12/16 kHz
Polarity reversal	Supported
Call progress tones	Supported in conjunction with COSI1
Maximum cable length (Ø 0.6 mm)	11.3 km
Integrated Line Tests	
Isolation tests	Supported
Foreign AC/ DC voltage tests	Supported
Noise tests	Supported
Capacity tests	Supported
Test execution	Cyclic or on-demand
Protection	
1+1 path protection	Supported
SNCP/I	Supported
Management	
FOXCST	For local management
FOXMAN-UN	For central management
Power Supply	
Input voltage nominal (min/max)	-48/-60 V DC (-40.5 V DC ... -72 V DC)
Operation Environment	
Temperature range and humidity	According to FOX615 environmental specifications
Emission/Imission	Supports extended requirements for dedicated networks